**3.4.2 Graphical skills**

Bar charts

* These are for presenting discrete data.
* There should be gaps between the bars, all the bars should be of equal width.
* The axes MUST be clearly labelled.



* Bar charts are actually quite basic. You could instead encourage pupils to draw comparative (or duel) bar charts or even composite bar charts. An example of each are below.





Histograms

* These are for presenting continuous data (i.e. anything that is measured, height, weight, time, distance etc)
* There are NO gaps this time as the x axis is showing continuous data.

Scatter graphs

* This type of graph compares to variables
* Pupils will have difficulty ‘scaling’ up the x and y axes. You could have the axes already prepared for them. ***It actually says in the Geog SOW ‘plot information on graphs when axes and scales are provided.***
* Use graph paper
* A line of best fit allows you to estimate ‘missing’ data. In Science, it tends to be a curved line but in Maths it is ALWAYS linear.
* Lines of best fit do not have to start at the origin.

Pie Charts

* In maths lessons, our pupils construct pie charts using the following method:



* There will be some pupils who find it difficult to measure the correct angle (even GCSE students). For instance, when drawing a 60° angle, they draw a 120° by mistake. This is because there are two sets of numbers on the protractor. Be patient. If it helps, let the maths dept know when you plan to draw pie charts and maybe we can help ‘prep’ the pupils.
* Use keywords that they are familiar with pupils e.g. acute, obtuse. We use these words to help pupils check that they have measured the correct angle.